48476

GUIDELINES RELATING TO GEOPHYSICAL ACTIVITIES IN THE NORTHWEST TERRITORIES

Written permission from the Department of the Environment

1. Written permission must be obtained from the Department of the Environment, Fisheries Service, before any geophysical activities using explosives may be conducted in, or near any water body. (Appendix 1; Fisheries Act Section 26) To obtain permission, the exploration permittee should write to the Department of the Environment regional office in Yellowknife supplying the information outlined in Appendix 2. Information on geophysical operations using no explosives should also be sent to the Yellowknife office. (Fisheries Act Section 33A (1), (2), (3); 33B).

Geophysical operations using explosive energy sources

2. Geophysical activities should be scheduled and located so that interference with migrating, spawning, incubating or rearing fish populations does not occur. Care must also be taken to ensure that geophysical operations are not conducted in regions where populations of marine mammals aggregate for feeding, breeding or nursing purposes. Under no condition will geophysical activities be permitted that would in any way damage the habitat or discourage habitation by fishes and marine mammals in any water body. (Fisheries Act Section 26, 30)

Use of explosives

3. All explosive shots must be detonated in cased holes. Casings in shot holes must be removed to a depth of not less than six (6) feet below the bottom of a water body, immediately after the detonation has been satisfactorily recorded or the explosive charge has been removed from the hole.

Stream Crossings

4. Stream crossings shall be constructed using the natural ice cover, where possible, or adding to the thickness of that cover by using snow and pumped water to form an ice bridge. Logs or poles may be used as a binding to form such ice bridges but unlimbed trees, roots, stumps, slash or other road building or land clearing materials are prohibited. The binding material for an ice bridge shall not be used in such a manner or quantity as to cause scouring of the stream bed. A channel shall be maintained under the ice bridge which will permit the flow of water if water continues to flow throughout freeze-up. All logs or poles used in such ice bridges shall be removed upon completion of operations or prior to spring breakup in such a manner that will not cause alteration of the stream bed. The company which originally constructs crossings shall be held responsible for their removal. A minimal use of gravel, grass, hay, moss or straw to give traction to vehicles on the surface and/or to give insulation for the ice surface is permitted. (Fisheries Act Sections 24 (1); 25; 33 (1), (3))

Gravel Removal

5. No gravel removal is permitted below the water level at the time of removal. Removal of gravel is permitted from bars above the water level by a scalping process down to within one(1) foot of the water level at the time of removal. If gravel is in a spawning area, removal is not permitted. When removal is completed, the bar is to be graded with sloping sides toward the water, and in a way that no depressions are left in the bar. (Fisheries Act, Section 30)

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Control of deleterious substances

6. Under no condition shall drilling mud or other deleterious substances be dumped directly into any water body. Adequate sump pits should be constructed which will not permit drilling mud or other chemicals to get into adjacent water bodies. Such pits should be covered by eight (8) feet of brush and/or soil before abandonment. Any flow of gas or water resulting from drilling a hole or shooting must be shut off as soon as possible and the hole plugged. All cuttings and materials obtained in drilling shot holes should be hauled from a water body and scattered above the high water line thereof, in such a manner that no interference or intermixing would occur in subsequent run-off entering an adjacent water body. (Fisheries Act, Section 33 (2), (4), (11).)

Fuel storage and container removal

7. All fuel drums and other fuel storage containers should be positioned in such a manner that spillage or leakage will not enter adjacent water bodies. Adequate containment or trenching around fuel bladders should be facilitated so that fuel from a ruptured bladder may be confined. All fuel drums and storage containers placed on frozen water bodies or near the usual high water mark of a water body should be removed from the site before breakup or when operations cease. (Fisheries Act, Section 33 (2), (4), (11).)

Equipment, garbage and domestic sewage disposal

8. No permittee, engaged in geophysical operations, shall leave equipment, buildings or other materials including debris and domestic wastes on ice or at a place from which it is likely to be carried to an adjacent water body upon expiration, conclusion or abandonment of such operations. All garbage and foreign debris should be eliminated by removal. If such a procedure is impractical, the waste should be burned, compacted with heavy machinery and preferably, buried. Under no condition, shall waste material be left on ice or frozen ground after termination of operations. Domestic wastes shall be regarded as garbage. For marine operations being conducted on ice far from land, and where burial or removal is impractical, domestic wastes may be piped below the ice where water depths greater than 100 feet exist. Under no condition shall domestic waste be treated with chemicals toxic to fish or those containing heavy metals such as zinc, lead, copper or mercury. (Fisheries Act, Section 33 (2), (4), (11).)

APPENDIX 1

Definitions:-

a. Geophysical activities may be defined as any gas or oil exploration including seismic, gravity and magnetometer surveys and drilling.

b. Water body may be defined as any stream (water course containing continuously flowing water) or lake (body of standing water where area of open water is greater than 10,000 square meters; 11,903 square yards) or ocean.

APPENDIX 2

1. The following information on planned or current geophysical work in the Northwest Territories should be sent to:

   Mr. G. Glazier
   District Administrator
   Department of the Environment
   Fisheries Service
   Yellowknife, Northwest Territories

2. The name and permanent address of the applicant and, in the case where the applicant is a registered company, the address of the head office of that company.

3. The names and permanent addresses of any and all operators (sub-contractors) who will be connected with the proposed operations on behalf of the applicant, and the name and title of the person who will be the field representative.

4. Intended dates of commencement and termination of operations.

5. The type of camp, capacity and type of fuel storage, the equipment to be used in the surface operation, and the proposed method for moving buildings and equipment from site to site. The proposed method of garbage and domestic waste disposal and type of chemicals, including any pesticides, which will be used in the operation.

6. A description of the techniques to be used in the operations. If the energy is explosive, the type, composition, magnitude and frequency per statute mile of shots are required.

7. A map (Scale 1:250,000) showing all seismic lines, proposed stream crossings and base camps.